## Amendments to the Claims:

 (Currently amended) A circuit for detection of internal microprocessor watchdog device execution in a microprocessor system comprising

a microprocessor with the having

a reset input,

an internal watchdog device generating a reset signal and connected to the reset input,
and

an input/output line <u>WDOG\_PIO</u> transmitting information about microprocessor reset independently from the reset signal and;

a device for resetting the microprocessor system and having

an activation input,

a system reset output connected to the reset input of the microprocessor and configured to generate a system reset signal at the system reset output responsively to an activation input signal received at the activation input, wherein to the input/output line (11) transmitting information about the microprocessor (6) reset, a clock input CK is connected, which triggers the:

a flip-flop (12), whose having

a clock input CK connected to the input/output line WDOG PIO of the microprocessor,

a data input D and an inverted reset input /R are-connected to an the system reset output of the device (19) for resetting the microprocessor system, and

Reply to Office Action of May 18, 2007

Application Serial No. 10/519,049 Attv Docket No. LHUD-01001-NUS

an inverted flip-flop (12) output /Q is connected to an the activation input of the

device (19) for resetting the microprocessor system.

2. (Currently amended) The circuit according to claim 1 further comprising

an external resistor (10) connecting the input/output line (11) transmitting information about

microprocessor (6) reset WDOG\_PIO to a power supply voltage ( $V_{CC}$ ).

3. (Currently amended) The circuit according to claim 1, wherein reset of the

microprocessor system resulting from the reset of the microprocessor (6) is performed when

the inverted reset input /R and the flip-flop (12) data input D are in a high state and the clock

input CK changes from a low to a high state.

4. (Currently amended) The circuit according to claim 1, wherein reset of the

microprocessor system resulting from the reset of the microprocessor (6) is blocked by a low

state of the inverted reset input /R of the flip-flop (12).

(Canceled)

(Canceled)

(Canceled)

3/7

- (Currently amended) A circuit for detection of internal processor watchdog device execution in a microprocessor system comprising
- a microprocessor having an input/output;
- an internal watchdog device linked to the microprocessor via reset signal lines and activating the microprocessor:
- a flip-flop having
  - a data input D,
  - an inverted reset input /R connected with the data input D,
  - an inverted output /O for resetting the microprocessor, and
  - a clock input CK connected to the input/output of the microprocessor via an input/output line transmitting information about microprocessor reset;
- a device for resetting the microprocessor and linked to the inverted output /Q and the inverted reset input /R of the flip-flop and the microprocessor; and
- an external resistor connecting the input/output line transmitting information about the microprocessor reset to a power supply voltage.
- 9. (New) A microprocessor system comprising:
- a microprocessor having
  - a reset input,
  - an internal watchdog device generating a reset signal and connected to the reset input of the microprocessor, and
  - an input/output line WDOG\_PIO configured to transmit information about microprocessor reset independently from the reset signal;

a system reset circuit having

an activation input, and

a system reset output connected to the reset input of the microprocessor and configured to generate a system reset signal at the system reset output responsively to

an activation input signal received at the activation input;

a flip-flop having

a clock input CK connected to the input/output line WDOG\_PIO of the

microprocessor,

a data input D and an inverted reset input /R connected to the system reset output of

the system reset circuit, and

an inverted output /Q connected to the activation input of the system reset circuit.

10. (New) The microprocessor system according to claim 9, further comprising

a Flash memory having a reset input connected to the system reset output of the system reset

circuit.

5/7